Please amend the following claims:

1.   (Amended)   A cloned DNA sequence [encoding a polypeptide] of *hap* gene, wherein the sequence has the formula:

ATGTTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGGCAAATCCTGGATTTCTACACTGCGAGT
CCGTCTTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGAA
TGGCAGCATCGGCACACTGCTCAATCAATTGAAACACAGAGCACCAGCTCTGAGGAACTCGTCCCA
AGCCCCCCATCTCCACTTCCTCCCCCTCGAGTGATCAAACCCTGCTTCGTCTGCCAGGACAAATCA
TCAGGGTACCACTATGGGGTCAGCGCCTGTGAGGGATGAAGGGCTTTTTCCGCAGAAGTATTCAGA
AGAATATGATTTACACTTGTCACCGAGATAAGAACTGTGTTATTAATAAAGTCACCAGGAATCGAT
GCCAATACTGTCGACTCCAGAAGTGCTTTGAAGTGGGAATGTCCAAAGAATCTGTCAGGAATGACA
GGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGCACAGAGAGCTATGAAATGACAGCTGAGT
TGGACGATCTCACAGAGAAGATCCGAAAAGCTCACCAGGAAACTTTCCCTTCACTCTCGCAGCTGG
GTAAATACACCACGAATTCCAGTGCTGACCATCGAGTCCGACTGGACCTGGGCCTCTGGGACAAAT
TCAGTGAACTGGCCACCAAGTGCATTATTAAGATCGTGGAGTTTGCTAAACGTCTGCCTGGTTTCA
CTGGCTTGACCATCGCAGACCAAATTACCCTGCTGAAGGCCGCCTGCCTGGACATCCTGATTCTTA
GAATTTGCACCAGGTATACCCCAGAACAAGACACCATGACTTTCTCAGACGGCCTTACCCTAAATC
GAACTCAGATGCACAATGCTGGATTTGGTCCTCTGACTGACCTTGTGTTCACCTTTGCCAACCAGC
TCCTGCCTTTGGAAATGGATGACACAGAAACAGGCCTTCTCAGTGCCATCTGCTTAATCTGTGGAG
ACCGCCAGGACCTTGAGGAACCGACAAAAGTAGATAAGCTACAAGAACCATTGCTGGAAGCACTAA
AAATTTATATCAGAAAAAGACGACCCAGCAAGCCTCACATGTTTCCAAAGATCTTAATGAAAATCA
CAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGTAATTACCTTGAAAATGGAAATTCCTG
GATCAATGCCACCTCTCATTCAAGAAATGATGGAGAATTCTGAAGGACATGAACCCTTGACCCCAA
GTTCAAGTGGGAACACAGCAGAGCACAGTCCTAGCATCTCACCCAGCTCAGTGGAAAACAGTGGGG
TCAGTCAGTCACCACTCGTGCAATAA,

wherein said DNA is in an isolated and purified form and encodes a retinoic acid receptor comprising a DNA binding domain and a hormone binding domain.

In claim 4, line 1, delete "1" and insert --57-- therefor.

In claim 5, line 1, delete "1" and insert --57-- therefor.

In claim 6, line 1, delete "1" and insert --57-- therefor.

In claim 7, line 1, delete "1" and insert --57-- therefor.

In claim 8, line 1, delete "1" and insert --57-- therefor.

In claim 9, line 1, delete "1" and insert --57-- therefor.

In claim 12, line 1, delete "9" and insert --11-- therefor.

In claim 13, line 1, delete "9" and insert --11-- therefor.

In claim 14, line 1, delete "9" and insert --11-- therefor.

24. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof <u>encoding a polypeptide capable of binding retinoic acid and functioning as a receptor</u> from a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim 1.

In claim 25, line 1, delete "20" and insert --24-- therefor.

In claim 26, line 1, delete "21" and insert --25-- therefor.

In claim 27, line 1, delete "20" and insert --24-- therefor.

In claim 28, line 1, delete "23" and insert --27-- therefor.

In claim 29, line 1, delete "20" and insert --24-- therefor.

In claim 30, line 1, delete "25" and insert --29-- therefor.

In claim 33, line 2, delete "DNA" and insert --a plasmid --; and

line 3, delete "said DNA" and insert --said plasmid --.

46. (Amended) A process for selecting a nucleotide sequence coding for *hap* protein or a portion thereof <u>encoding a polypeptide capable of binding retinoic acid and functioning as a receptor</u> from

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a group of nucleotide sequences comprising the step of determining which of said nucleotide sequences hybridizes to a DNA sequence as claimed in claim ~~30~~ 59.

In claim 47, line 1, delete "24" and insert --46-- therefor.

In claim 48, line 1, delete "24" and insert --47-- therefor.

In claim 50, line 1, delete "46" and insert --48-- therefor.

In claim 55, line 2, delete "DNA" and insert --a plasmid--; and

line 3, delete "said DNA" and insert --said plasmid--.

Please add the following new claim:

--57. A cloned DNA sequence encoding a polypeptide of *hap* gene, wherein the DNA sequence has a formula selected from the group consisting of:

(a) GTCAGGAATGACAGGAACAAGAAAAAGAAGGAGACTTCGAAGCAAGAATGC;

(b) GCTGAGTTGGACCATCTCACAGAGAAGATCCGA;

(c) GGGGTCACTCAGTCACCACTCGTGCAA;

(d) AATGACAGGAACAAGAAAAAGAAGGAGACT;

(e) ATGTTTGACTGTATGGATGTTCTGTCAGTGAGTCCTGGGCAAATCCTCGATT TCTACACTGCGAGTCCGTCTTCCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGC TTCAGTGGATTGACCCAAACCGAATGGCAGCATCGGCACACTGCTCAATCA; and

(f) CATGAACCCTTGACCCCAAGTTCAAGTGGGAACACAGCAGAGCACACTCCTA GCATCTCACCCAGCTCAGTGGAAAACAGTGGGGTCACTCAGTCACCACTCGTGCAA.--